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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,252	09/19/2005	Jean-Marie Basset	0512-1264	3629
466 7590 07/30/2010 YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			EXAMINER SAVAGE, MATTHEW O	
			ART UNIT 1797	PAPER NUMBER
			NOTIFICATION DATE 07/30/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

### Office Action Summary

**Application No.**

10/525,252

**Applicant(s)**

BASSET ET AL.

**Examiner**

Matthew O. Savage

**Art Unit**

1797

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-16, and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7, 10-16, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to part (a) of claim 1, it is unclear as to which type of elements the term "metal M" is meant to encompass since the list includes several non-metals (silicon, germanium, arsenic, selenium, tellurium, iodine, and astatine).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, and 10-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al.

With respect to claims 1 and 7, Hirata et al disclose a method for reducing the content of contaminating metals in ionic form present in aqueous effluents (e.g., palladium wastewater, see line 16 of col. 7), the method including the steps of providing an aqueous effluent including at least a metal M<sub>i</sub> in ionic form (e.g., palladium and nickel, see lines 19-23 of col. 7), placing the aqueous effluent in contact with at least a

metal (e.g., nickel, see lines 7-10 of col. 7) that is obviously completely or partially coated with hydrogen during the treatment of the metal ion(s) (e.g., when placed in contact with the water containing the metal contaminants as disclosed on lines 16-27 of col. 7), the palladium metal ions being chemisorbed onto the metal (e.g., since the metal is laminated and grows to form a metal coating film on the treating agent, see lines 22-27 of col. 6); and b) recovering the aqueous effluent (e.g., via the extraction column mentioned on line 18 of col. 7). Hirata et al fail to specify the nickel ions as being chemisorbed on the metal  $M_h$ . Hirata et al teach that nickel ions are initially deposited on the support to form a coating such that all of the nickel ions in solution are consumed from the aqueous solution via chemisorption (see lines 9-15 of col. 7). Accordingly, one of ordinary skill in the art would obviously expect the nickel coating on the adsorbent to continue to grow via chemisorption if placed in another aqueous solution containing nickel ions as well as palladium complex ions.

As to claims 2-6, Hirata et al disclose nickel (see line 65 of col. 6).

Regarding claims 9-11, Hirata et al disclose gold (see line 16 of col. 2).

Concerning claim 12, Hirata et al disclose nickel (see lines 19-23 of col. 7).

Regarding claim 13, Hirata et al disclose a support (e.g., activated carbon, see lines 38 and 39 of col. 6).

As to claims 14 and 18, Hirata et al disclose a range of 10-70 degrees C which falls within the claimed ranges.

Concerning claim 15, Hirata et al disclose a pH value of 7.9 that falls within applicants claimed range of 1-14.

Regarding claim 16, Hirata et al disclose plating wastewater (see line 17 of col. 2).

Applicant's arguments filed 6-15-10 have been fully considered but they are not persuasive.

Applicant's argument that Hirata et al disclose the treatment of aqueous solutions containing gold and palladium complex ions is not agreed with since the reference also discloses that nickel ions are included palladium complex ions (see lines 19-23 of col. 7). Furthermore, such a finding does not distinguish over claim 1 since claim 1 does not exclude the presence of gold or palladium complex ions.

Applicant argument that non-noble metals cannot adsorb hydrogen is not agreed with since applicant claims several non-noble metals that can adsorb hydrogen or coated (see instant claim 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew O Savage/  
Primary Examiner  
Art Unit 1797

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